Erosion Control Tools & Techniques

Best Management Practices
for water quality while harvesting forest products

Erosion Control Measures

EVEN WITH THE USE OF THE WATER CONTROL MEASURES PREVIOUSLY MENTIONED, THE USE OF ADDITIONAL MEASURES MIGHT BE REQUIRED TO PREVENT TRANSPORTATION OF SEDIMENT OFF SITE.

Filter Strips

Located between watercourses and heavily disturbed areas, such as roads and landings, filter strips work to absorb runoff and reduce overland flow that can carry suspended sediments into water bodies. Timber harvesting is permitted in filter strips, but the operation of logging machinery should be limited to skid trails only. Truck

Recommended Widths of Filter Strips Between Truck Roads and Streams

Land Slope Between Road and Stream (%)	Width of Filter (Feet)
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

and skid roads should not be located in filter strips except where stream crossings are necessary. In order to minimize any increase in streamwater temperature, timber harvesting should not reduce the crown cover below 50 percent

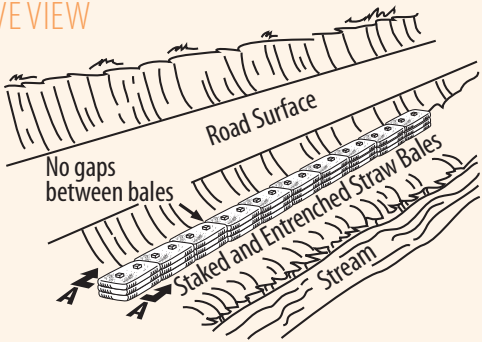
Tracking Mats

Tracking mats can be purchased or made from recycled tires, wooden planks or other suitable material. They can be used in many situations (access roads, skid trails, landings, and ford crossings) to prevent or reduce erosion. Tracking mats protect the underlying root masses and minimize soil disturbance.

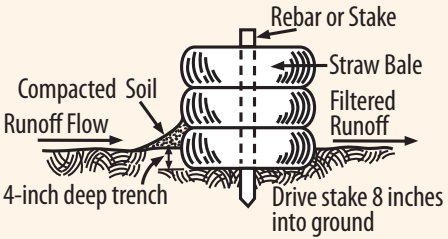
Sedimentation Barriers

Baled hay or silt fencing can be utilized where extensive erosion is possible. Proper installation and maintenance of sedimentation barriers is critical, poor installation accomplishes nothing.

PERSPECTIVE VIEW



DETAIL A-A



Hay Bales

Hay bales need regular maintenance. To maintain effectiveness, hay bales need to be inspected weekly and after storms. Install the hay bales so that the cut edge of the hay is facing up and down.

Silt Fencing

Silt fencing is installed down gradient from disturbed areas, such as landings, roads and trails to prevent sediment-laden water from moving overland and entering watercourses.

Installation guidelines:

- Locate stakes 4-6 feet apart, leaving a minimum stake height of 2.5 feet in height above the ground.
- The silt fence fabric should be attached to the stakes on the uphill side.
- Bury the base of the fabric 4 inches into the ground or backfill on the uphill side of the fabric with 4 inches of compacted soil or crushed stone.

Geotextile Fabrics

Geotextiles are synthetic permeable fabrics used to stabilize soil and other materials. Geotextile material provides separation, increases the load carrying capacity, reduces the incidence of ruts and preserves the integrity and extends the life of the road surface layer. Generally, the use of geotextile fabrics extends the length of season that the road can be used and further saves money by reducing the need for additional gravel and maintenance. There are a number of different types of geotextiles for many different uses, contact a distributor for more information.

GEOTEXTILE FABRICS